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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,582	04/26/2001	Yuchun Wang	4260/P1/CMP/CMP/RKK	8732

32588 7590 04/17/2003

APPLIED MATERIALS, INC.
2881 SCOTT BLVD. M/S 2061
SANTA CLARA, CA 95050

EXAMINER

NGUYEN, DUNG V

ART UNIT

PAPER NUMBER

3723

DATE MAILED: 04/17/2003

20

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/843,582

Applicant(s)

WANG ET AL

Examiner

Dung V Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 17.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Andros (USPN 5,844,030). Andros discloses a scrubber comprising a substrate support adapted to support a substrate, a brush 62 coupled so as to contact a substrate supported by the substrate support, the brush 62 having a surface adapted to contact a surface of a substrate to be scrubbed, a complexing agent 40 coupled to the scrubber brush surface, the complexing agent 40 adapted to chemically bond metal particles, and a mechanism adapted to generate relative movement between the substrate and the brush 62, wherein the complexing agent 40 is adapted to bond to a metal compound which is a metal oxide, wherein the complexing agent 40 is a solid material attached to scrubber brush 62, wherein the complexing agent 40 is attached to the scrubber brush surface by blending (note Fig. 1-9, col. 2, lines 38-67, col. 4, lines 7-56, col. 7, lines 18-65, col. 9, line 66 to col. 13, line 9).

Response to Arguments

3. In response to applicant's argument that Andros reference ('030) does not teach or suggest "complexing agent adapted to chemically bond to metal particles", Andro discloses that complexing agent adapted to chemically bond to metal particles and not

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by electrostatic attraction in col. 4, lines 37-55 as follows: "It has been determined that the most effective means of removing ultra-fine particles from hydrophobic surfaces, such as the surfaces of semiconductor wafers and memory disks, is by attracting and retaining the particles. PVAS sponges are inadequate for this purpose, relying solely on mechanically removing particles. The electrostatic force or van der Waals force which binds fine particles to a hydrophobic surface are not easily or satisfactorily overcome by mechanical means. Cationic sponge is created according to the teachings of the present invention, by cross-linking an hydroxylated polymer, preferable a PVA molecule to a cationic hydroxylated polymer, preferably a cationic polyvinyl alcohol molecule, thereby forming a micro-porous sponge material capable of attracting and removing charged particles, including ultra-fine particles. Formation of the cationic sponge consists of first forming cationic PVA. This is accomplished by forming an epoxide and reacting it with PVA to produce cationic PVA."

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

5. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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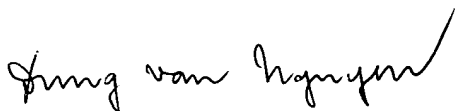
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V Nguyen whose telephone number is 703-305-0036. The examiner can normally be reached on M-F, 6:30-3:00.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J Hail can be reached on 703-308-2687. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

8. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

DVN
April 15, 2003

A handwritten signature in cursive script, appearing to read "Dung van Nguyen", with a long horizontal flourish extending to the right.

Dung Van Nguyen
Patent Examiner